NEW INSIGHTS ON NEMATODE MANAGEMENT ON BANANAS IN THE FRENCH CARIBBEAN [NOVAS ALTERNATIVAS NO MANEJO DE NEMATÓIDES EM BANANAS NA REGIÃO DO CARIBE DA FRANÇA] Quénéhervé, P.[1]; Achard, R.[2]; Tixier, P.[2]; [1]IRD; [2]CIRAD, Pôle de Recherche Agro-environnementale de la Martinique, BP 214, 97285, Le Lamentin Cedex 2, Martinique (FWI). Email: queneherve@ird-mq.fr

Given the increasing societal demand for more eco-aware farming practices during the last decade, considerable changes and innovations have already occurred in banana cropping systems worldwide, from the former concept of Integrated Pest Management (IPM) that relied heavily on the use of chemical control towards a more sustainable concept of Integrated Crop Management that favours non-chemical pest management. These innovative methodologies were particularly more rapidly adopted in countries where environment, health and safety conditions were politically prioritized. But there are also additional causes to this rapid transformation for designing more sustainable cropping systems, i.e. economical endowments, environmental policies, and retailing chain requirements. In the French West Indies, the reduction of pesticide impact on air, soil and water quality is a major goal of agronomy research. As a result, management approaches that combine different tools for pest management such as use of improved fallows, crop rotations, replants with banana vitroplants, resistant cultivars are discussed in relation with the different banana cropping systems. As an example, alternate cropping of bananas, pineapple or sugarcane combined with appropriate horticultural practices (chemical destruction of former banana plants, weeding during fallow) have already eradicated the burrowing nematode *Radopholus similis* from some areas in Martinique. In addition, some forage crops (*Brachiaria spp*.) or leguminous cover crops (e.g. *Crotalaria spp*., *Neonotonia wightii*) may be used in intercrop to remove or decrease under threshold level some other key-pests (e.g. lesion nematodes *Pratylenchus coffeae*, spiral nematodes *Helicotylenchus multicinctus* and root-knot nematodes *Meloidogyne* spp.) from soil. However, the adoption of these innovative practices strongly depends on the farming contexts and an evaluation of these innovations using crop models might be useful tools to help researchers and stakeholders.